

Lower San Joaquin River Committee



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September 20, 2013

Current Status and Problem

- 2004 Salt and Boron Basin Plan Amendments and TMDL
 - Meet salinity water quality at Vernalis to protect agricultural beneficial uses in the Delta

Season	EC* (umhos/cm)	Boron** (mg/L)
Irrigation	700	0.8
Non-irrigation	1,000	1.0
Critical Year	--	1.3

* = 30-day running average

** = monthly mean

- Develop salt and boron objectives for the SJR upstream of Vernalis

Approach

- Initially: Central Valley Water Board staff effort
- 2010: Moved under the umbrella of CV-SALTS
 - Provide consistency for salinity activities in Central Valley
 - Formed Lower San Joaquin River Committee (LSJRC)
 - Stakeholder lead effort



LSJRC

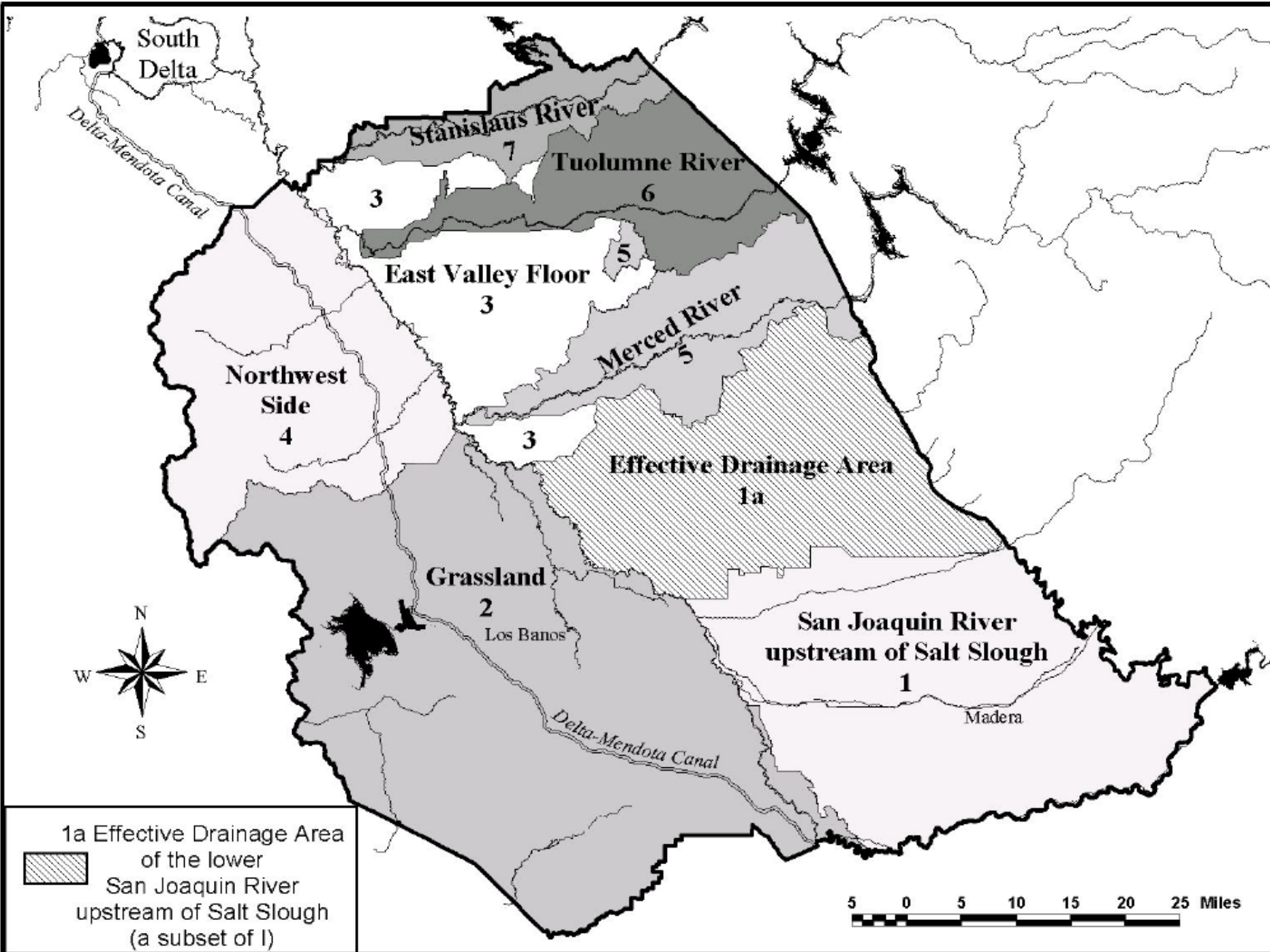
- Stakeholder based
 - Open membership
 - Anyone can join at any time
- LSJRC manager
- Technical contractor
 - Larry Walker Associates, Davis
- Monthly meetings in Modesto
- Should finish work in 2015



LSJRC Goals

Basin Plan Amendment—Salt/B water quality objectives

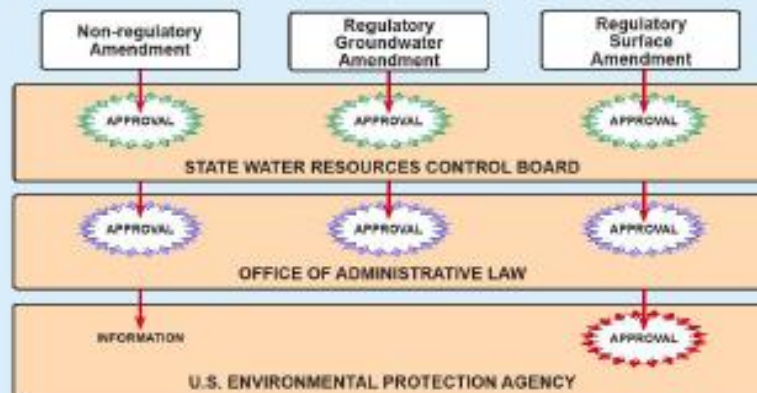
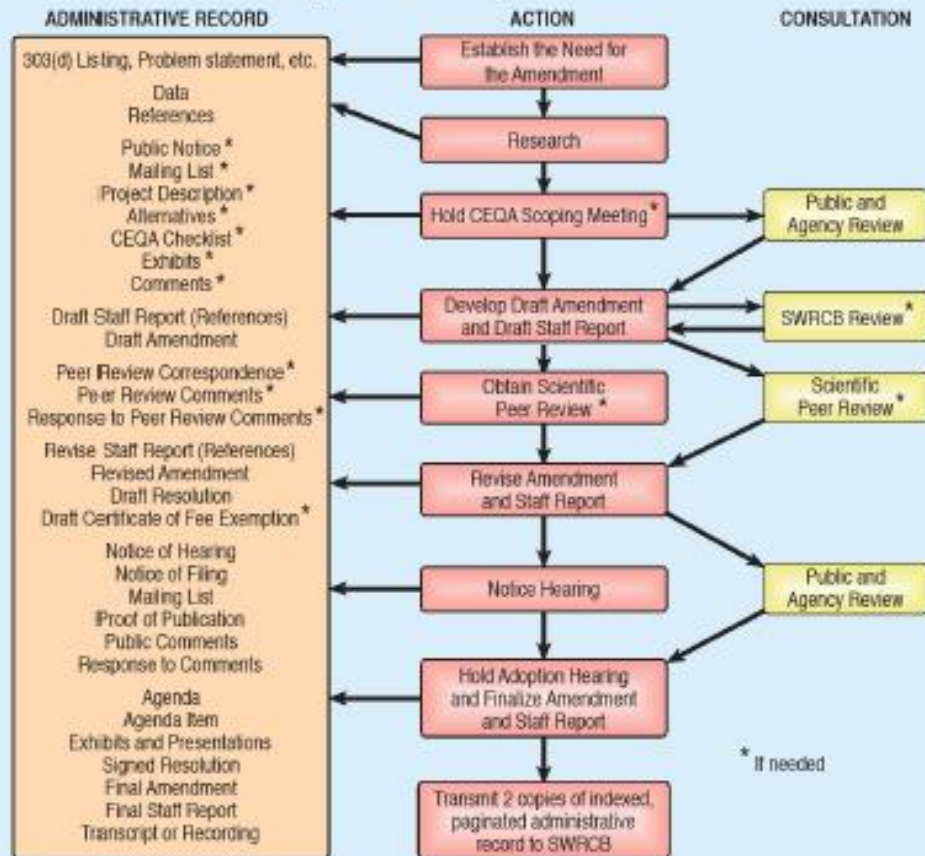
- Maximum protection of beneficial uses
- Maintain capability to increase level of beneficial use
- Develop a comprehensive plan to achieve salt balance
- Establish water quality objectives and implementation mechanisms to protect beneficial uses of the LSJR and downstream
- Develop objectives and implementation based on sound science
- Identify feasible plans for funding implementation alternatives
- Develop broad public understanding and ownership of the salt management plan
- Provide regulatory certainty to encourage capital investment and long-range planning
- Use common language, understanding and decision tools



Getting Your Basin Plan Amendment Approved

BASIN PLANNING PROCESS

Regional Water Quality Control Board



Tasks

- Technical Tasks – LWA
 - Review Beneficial Uses of water in SJR
 - Water quality criteria review
 - Documents developed by CV SALTS (MUN, AGR, Aquatic Life, Stock Watering)
 - Identify potential range of Water Quality Objectives
 - Conduct water quality and salt loading characterization
 - Compile and update water quality data
 - Update 2004 staff report analysis of baseline salt loading
 - Conduct analysis of existing water quality and compliance with possible Water Quality Objectives

Tasks

- Conduct implementation planning
 - Identify implementation alternatives
 - Develop methods to screen alternatives
 - Select alternatives for detailed analysis
 - Conduct detailed analysis
 - Propose alternative for implementation
 - Develop and define the program of implementation



Implementation Alternatives

TMDL Approach (similar to current Vernalis Approach)

- Waste load allocations for point source discharges are concentration based
 - Equal to the existing salinity water quality objectives for the LSJR at the Airport Way Bridge near Vernalis.
- Fixed load allocations for nonpoint source dischargers
- Fixed base load allocations designed to protect water quality during low flow conditions.
 - Implementation is by subarea
- Limiting discharges through fixed load allocations, however, could result in a **net salt build-up in the LSJR** watershed because salts would continue to be imported to the watershed in supply water but salt exports would be significantly restricted.

Implementation Alternatives

Real-Time Management

- Develop opportunity for dischargers to use **real-time allocations** to maximize salt exports while still meeting water quality objectives. Real-time load allocations are formulaic, based on actual real-time flow and water quality conditions.
- Dischargers participating in a Regional Board approved real-time management program would be allowed to use real-time load allocations in lieu of the fixed base load allocations.

Tasks

- Economic analysis
- Develop long-term monitoring program
- Prepare Substitute Environmental Documentation



Summary

- Surface water focus on salt and boron
- Stakeholder driven process
- Technical work initiated within last month
- Explore implementation options including real-time management
- Will complete work sometime in early 2015
- Work product is a Basin Plan Amendment
 - Salt and boron water quality objectives in LSJR and an implementation program

